3.6 MIRE POND SCRUB/SHRUB SYSTEM STUDY SITE

3.6.1 Qualitative Site Description

Physical description. The site (Figure 11) covers 5 ha and is complex because it consists of a number of different types of wetlands and some upland areas. For this reason we have chosen to divide the site into two sections (estuarine and palustrine). The estuarine portion consists primarily of the estuarine

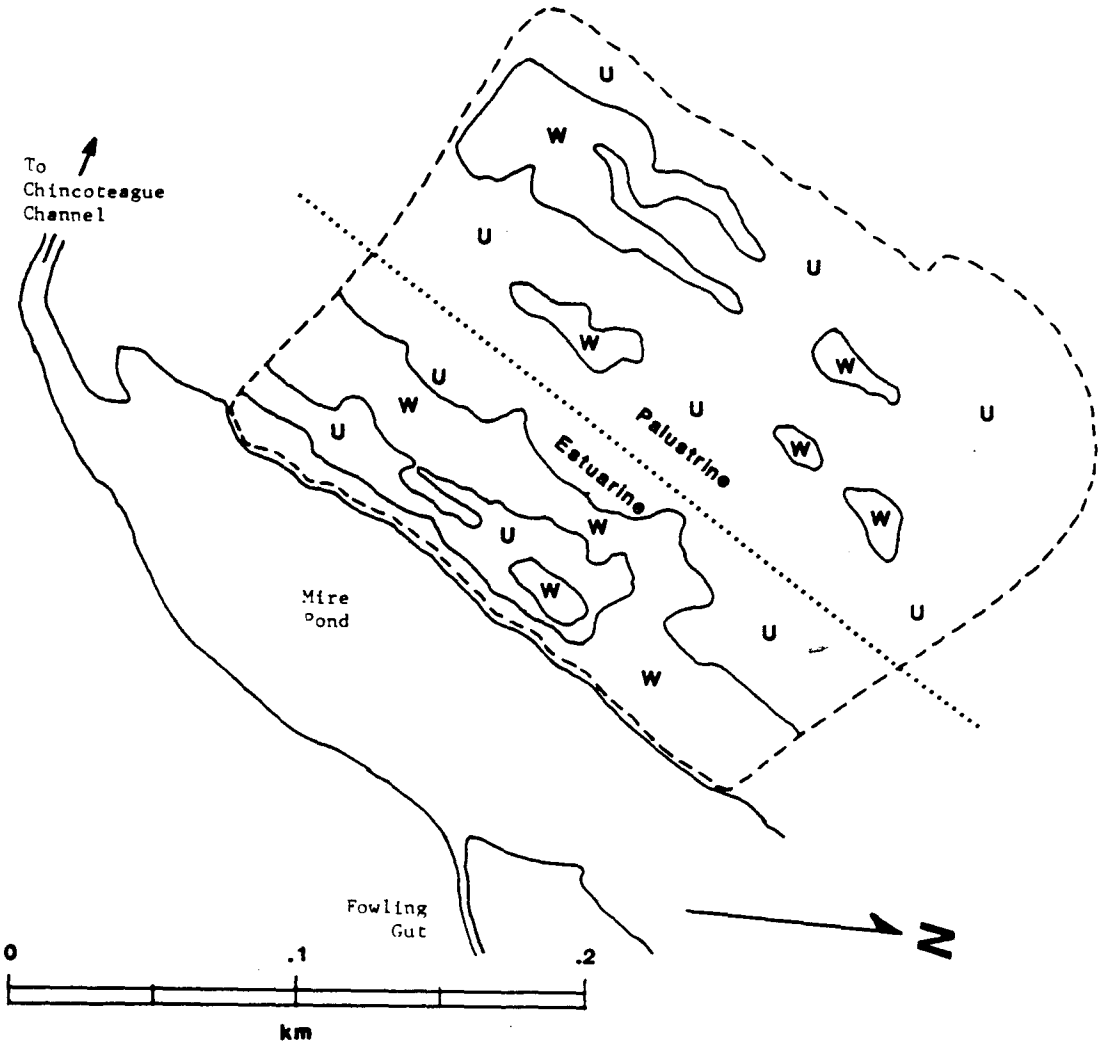


Figure 11. Map of Mire Pond Scrub/Shrub System WIA showing wetland (w) and upland (u) areas. Major outlet is indicated by arrow that depicts the direction of water movement from the site. Estuarine and palustrine portions of the WIA are separated by dotted line.

wetlands lying along Mire Pond. The palustrine portion consists of extensive, but scattered freshwater emergent wetlands and associated scrub/shrub wetlands. The two sections of this site have been divided along the line of the pine ridge which runs from the northeast to the southwest down the center of the site.

Definitions. The WIA consists of the site as outlined by EPA. The basin for the estuarine site includes Mire Pond and Fowling Gut to Chincoteague Bay. At the palustrine site the basin equals the wetlands because they drain internally under all conditions but the most extreme storms. The sub-watershed for both sites consists of the upland pine-dominated ridges within each area and for the estuarine site, a fringe of developed land surrounding Fowling Gut.

Qualitative vegetation description. Vegetation on these two sites is structurally complex. The upland areas are dominated by pine forest, small oaks, and shrubs such as Myrica. The estuarine wetlands are dominated by Spartina patens, Distichlis, Hibiscus, a small amount of S. alterniflora, and some Kosteletzkya virginica. The palustrine, emergent wetlands are dominated by Hibiscus, Rosa, Rumex, Scirpus spp., Polygonum, Typha, and Kosteletzkya. The palustrine scrub/shrub wetlands are dominated by willows, Sumac, Myrica, and Phragmites (adjacent to settled areas to the west).

Wetlands classification. The wetlands associated with the estuarine site are estuarine emergent wetlands with scattered areas of estuarine scrub/shrub. The palustrine site has both palustrine emergent and palustrine scrub/shrub wetlands.

Substrate, water salinity. Substrates in all of these areas are primarily sand overlain by a thin layer of organic material. As at other sites on Chincoteague, the ridges have more sandy loam. Salinities in the palustrine wetlands are generally less than 1 or 2 ppt, but salinities in Mire Pond range between 10 and 25 ppt seasonally.

Wildlife use. The estuarine wetland areas are utilized by the same variety of waterfowl, shorebirds, and fishes as at the estuarine portion of the adjacent Mire Pond fill site. The palustrine emergent wetlands appear to be used by waterfowl seasonally. The upland areas and palustrine scrub/shrub wetlands are used by a variety of small mammals and passerine birds. The estuarine system consisting of Mire Pond and adjacent wetlands clearly serves as an important nursery area for fishery organisms.

Hydrologic functions. Drainage from the estuarine portion of the site occurs by limited tidal exchange with Mire Pond during dry and average rainfall periods. During wet periods drainage occurs by sheet flow into the pond and through Fowling

Gut toward Chincoteague Bay. During extreme events some surface exchange of water probably occurs with the palustrine site. Otherwise drainage from the palustrine site is solely internal, either flowing vertically into the subsurface sand or collecting in the two or three lower-lying palustrine emergent wetlands which lie in the center of the site.

Because of these drainage characteristics, both portions of the site should have high potential for flood storage and nutrient retention. The palustrine portion because of its lack of an outlet should have a high ground-water recharge potential while that of the estuarine portion of the site is probably low to moderate.

3.6.2 Adamus and Stockwell Evaluations: Mire Pond Scrub-Shrub System - Estuarine Portion

Summary Sheet D

This form is the appropriate place for recording the ratings that result from use of the interpretation procedures and keys in Sections 2.1.2, and 2.2.2. As each analysis is completed, enter its rating (high,moderate, or low; or A, B, or C) in the relevant box until all boxes for functions of interest are filled.

Begin by labeling the context of the analysis (pre- or post- construction, with or without mitigation, name of basin and WIA). Then enter the data, using the numbered footnotes to help locate the associated analyses. For the evaluation of each function's Effectiveness, enter whichever rating is higher--That for the basin or that for the WIA. The evaluation of the impact vector is optional.

BASIN _____ WIA _____ PROJECT _____

EVALUATION TIME FRAME (PRE/POST) _____ MITIGATION PLAN # _____

FUNCTION	EFFECTIVENESS[1]	OPPORTUNITY[1]	FUNCTIONAL RATING[2]	SIGNIFICANCE[3]	FUNCTIONAL SIGNIFICANCE[4]
GROUND WATER RECHARGE[5]	low	moderate	low	moderate	low
GROUND WATER DISCHARGE[6]	low		low	high	low
FLOOD STORAGE[7]	high	high	high	moderate	high
SHORELINE ANCHORING[8]	moderate	low	moderate	moderate	moderate
SEDIMENT TRAPPING[9]	moderate	high	high	high	very high
NUTRIENT RETENTION					
LONG-TERM[10]	moderate	high	high	high	very high
SEASONAL[11]	moderate	high	high		very high
FOOD CHAIN SUPPORT					
DOWNSTREAM[12]	moderate		moderate	moderate	moderate
IN-BASIN[13]	moderate		moderate		moderate
FISHERY HABITAT					
WARMWATER[14]	low		low		low
COLDWATER[14]				moderate	
COLDW.RIVERINE[14]					
ANADROMOUS RIV. SPECIES[14] Bl.Fish,Hd. Cl.,Win.Fl.*	moderate		moderate		moderate
WILDLIFE HABITAT					
GENERAL DIVERSITY[15]	moderate		moderate		moderate
WATERFOWL GP.[17] 1	low summer	low winter	low	moderate	low
WATERFOWL GP.[17] 2	low summer	low winter	low		low
SPECIES[16] Black Duck		low winter			low
SPECIES[16] Common Egret	high		high		high
SPECIES[16]					
ACTIVE RECREATION[18]					
SWIMMING	low		low	moderate	low
BOAT LAUNCHING	low		low		low
POWER BOATING	low		low		low
CANOEING	moderate		moderate		moderate
SAILING	low		low		low
PASSIVE RECREATION AND HERITAGE[19]				moderate	moderate
IMPACT VECTOR RATING[21]					

FOOTNOTES

These entries will be based on analyses in the following parts of Volume II (numbers correspond to footnotes above):

[1]-Forms A, A1 (p. 6, 51); [2]-Section 2.1.2.2. (p. 97); [3]-Forms B, B1 (p. 38, 54); [4]-Section 2.1.2.2. (p. 97); [5]-Interpretation key in Section 2.1.2.1. p. 57; [6]-p. 59; [7]-p. 60; [8]-p. 62; [9]-p. 64; [10]-p. 67; [11]-p. 67; [12]-p. 69; [13]-p. 71; [14]-p. 73; [15]-p. 75; [16]-p. 79; [17]-p. 80; [18]-p. 84; [19]-p. 91; [20]-p. 92; [21]-p. 93.

* Blue Fish, Hard Clam, Winter Flounder

Response Sheet A1

THRESHOLD ANALYSIS: FUNCTIONAL OPPORTUNITY AND EFFECTIVENESS

This sheet is the appropriate place for recording the responses to corresponding questions in Form A. A "yes" (Y) or "no" (N) response must be circled for all parts of each question, even when the response seems obvious. This response sheet has two major columns--"WIA" and "BASIN", and within each of these, three subcolumns entitled "X̄", "W", and "D", which address, when relevent, the seasonal changes in some of the predictors, as follows:

X̄ column responses are those addressing either (a) the average annual condition, or (b) the condition intermediate between the wettest and driest annual conditions (e.g., late June in most Prairie pothole wetlands), or (c) the condition of maximum annual standing crop of wetland plants, or (d) if tidal, the average daily mid-tide condition.

W column responses are those addressing what the area would look like (a) during the wettest time of an average year, or (b) if the area is tidal, what it would look like during an average daily high tide (flooded) condition.

D column responses are those addressing what the area would look like during either the driest time of the year (questions pertaining to hydrology) or if the question pertains to vegetation, then during the dormant time of the year. If the area is tidal, "D" refers to its daily low tide (exposed) condition.

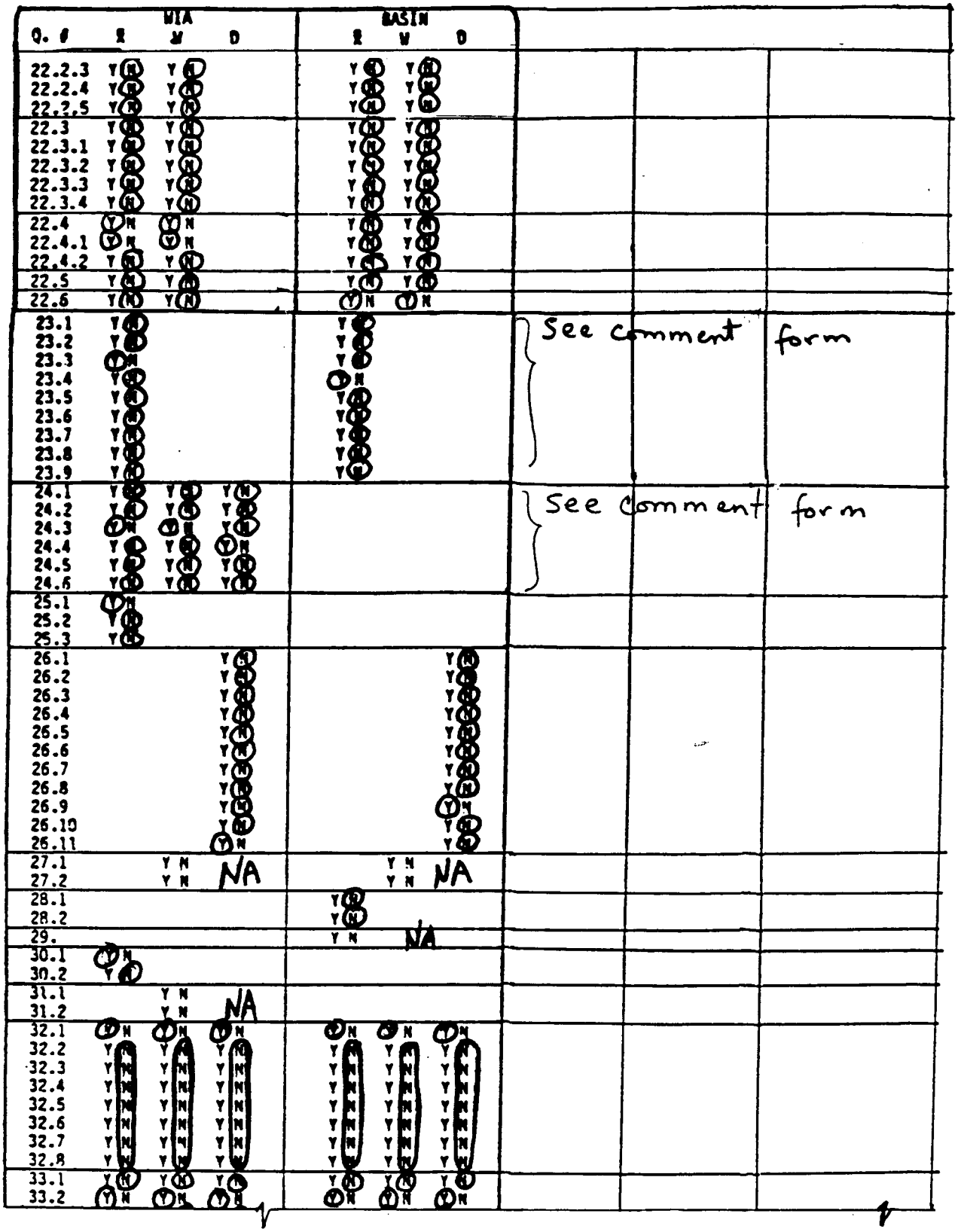
For example, question 2.1.1 should first be asked and answered in the context of the WIA's (wetland impact area's) average condition, then in terms of its wettest condition, then the basin's average condition, and finally the basin's wettest condition. This should then be repeated for question 2.1.2. Because no Y/N choice is given in either "D" column, the area's dry or dormant condition need not be evaluated for this question. Similarly, some questions will require responses only for the WIA or basin, but not both.

Q. #	WIA X̄	WIA W	WIA D	BASIN X̄	BASIN W	BASIN D
Office-type Data						
1.1	Y (N)	Y (N)	Y (N)	Y (N)	Y (N)	Y (N)
1.2	Y (N)	Y (N)	Y (N)	Y (N)	Y (N)	Y (N)
1.3	(Y) N	(Y) N	(Y) N	(Y) N	(Y) N	(Y) N
1.3.1	Y (N)	Y (N)	Y (N)	Y (N)	Y (N)	Y (N)

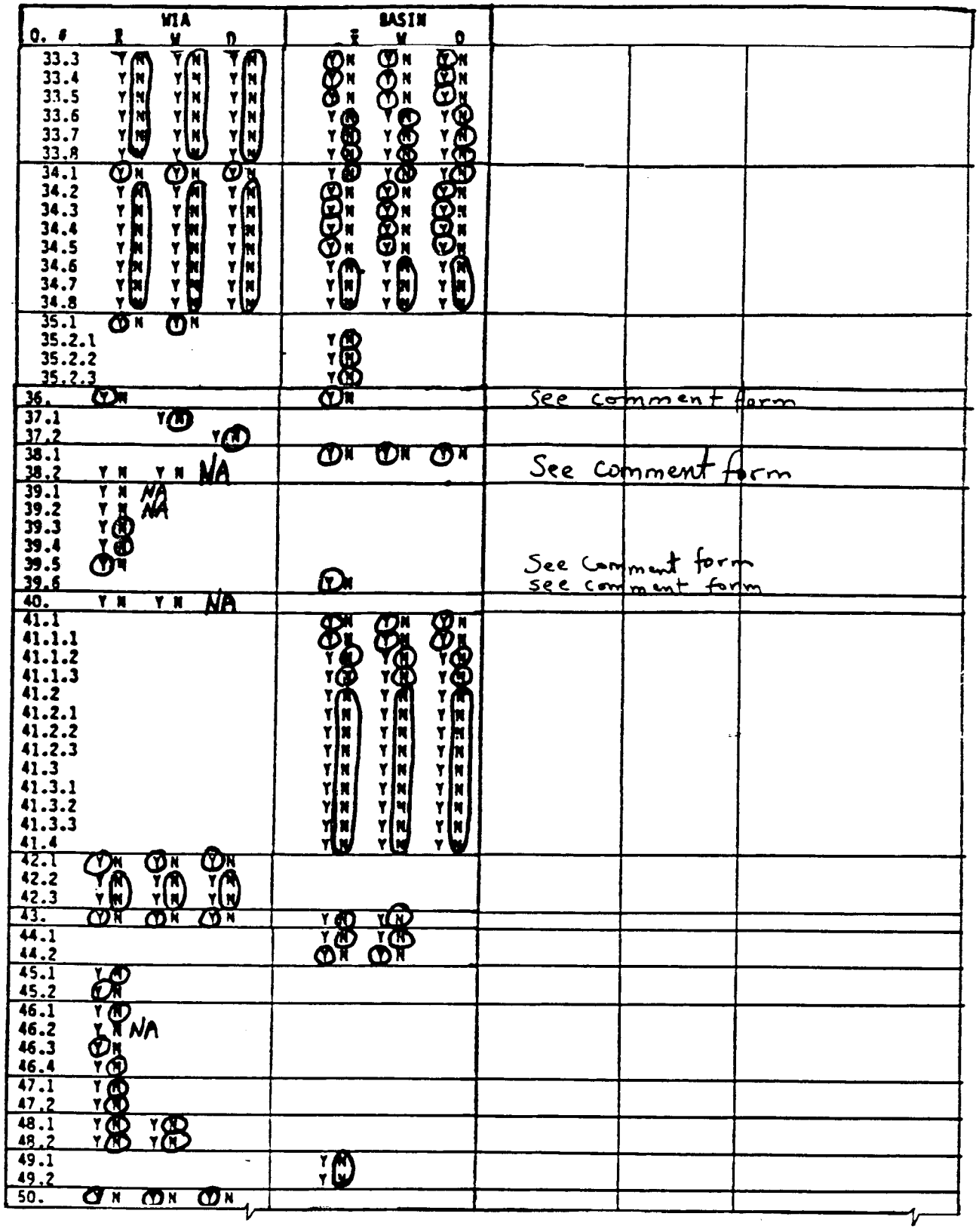
Mire Pond Scrub-Shrub System - Estuarine Portion

Q. #	WIA I	WIA W	WIA D	BASIN I	BASIN W	BASIN D	
2.1.1	Y N	Y N		Y N	Y N		
2.1.2	Y N	Y N		Y N	Y N		
2.2.1	Y N	Y N		Y N	Y N		
2.2.2	Y N	Y N		Y N	Y N		See comment form
3.1							See comment form
3.2							
4.1	Y N						
4.2	Y N						
5.1				Y N			See comment form
5.2				Y N			
6.1		Y N					
6.2		Y N					
7.1				Y N			See comment form
7.2				Y N			
8.1					Y N		See comment form
8.2					Y N		
9.1				Y N			See comment form
9.2				Y N			
10.1	Y N						
10.2	Y N		NA				
10.3	Y N						
10.4	Y N						
11.1	Y N						
11.2	Y N						
12.1		Y N					
12.2		Y N	NA				
13.1				Y N			
13.2				Y N	NA		
14.	Y N			Y N			
15.1	Y N						
15.2	Y N						
15.3	Y N						
15.4	Y N						
15.5	Y N						
15.6	Y N						
15.7	Y N						
16.	Y N						
17.1	Y N						
17.2	Y N						
18.	Y N						
19.	Y N						
20.				Y N			
21.1	Y N						See comment form
21.2	Y N						
21.3	Y N						
21.4	Y N						
21.5	Y N						
21.6	Y N						
Field-type Data							
22.1	Y N	Y N		Y N	Y N		
22.1.1	Y N	Y N		Y N	Y N		
22.1.2	Y N	Y N		Y N	Y N		
22.1.3	Y N	Y N		Y N	Y N		
22.1.4	Y N	Y N		Y N	Y N		
22.1.5	Y N	Y N		Y N	Y N		
22.2	Y N	Y N		Y N	Y N		
22.2.1	Y N	Y N		Y N	Y N		
22.2.2	Y N	Y N		Y N	Y N		

Mire Pond Scrub-shrub System - Estuarine Portion



Mire Pond Scrub-Shrub System - Estuarine Portion



Mire Pond Scrub-Shrub System - Estuarine Portion

Q. #	AREA I	AREA W	AREA D	BASIN I	BASIN W	BASIN D	
51.		(Y) N					
Detailed Data							
52.1.1	Y N	NA					No Measurements
52.1.2	Y N	NA					
52.2.1	(Y) N						
52.2.2	Y (N)						
53.1	Y N						No Measurements
53.2	Y N	NA					
54.1	Y N						No Measurements
54.2	Y N	NA					
55.	Y (N)						
56.				Y N	NA		No measurements
57.1	Y N						
57.2	Y N						
57.3	Y N	NA					
57.4	Y N						
58.1	Y N						No measurements
58.2	Y N						
58.3	Y N	NA					
58.4	Y N						
59.1				Y N			No measurements
59.2				Y N	NA		
59.3				Y N			
60.1						Y N NA	No Measurements
60.2				Y N			
60.3				Y N	NA		
61.1	Y N						No Measurements
61.2	Y N	NA					
62.	Y N	NA					
63.1						Y N	
63.2				NA		Y N	
64.				NA		Y N	NO Measurements
65.	(Y) N						
66.1		Y N				Y N	
66.2		Y N	NA	NA		Y N	No Measurements
67.1		Y N				Y N	
67.2		Y N	NA	NA		Y N	No Measurements
68.1	Y N					Y N	
68.2	Y N		NA			Y N	No Measurements
Derived Responses							
69.1	Y N						
69.2	Y N						
70.1	Y N						
70.2	Y N						
71.1	Y N						
71.2	Y N						
72.1	Y N						
72.2	Y N						
73.1	Y N						
73.2	Y N						
74.1	Y N						
74.2	Y N						
75.1	Y N						
75.2	Y N						

After responses to all possible questions (Form A) have been recorded above, turn to Form B (page 38). You will(as an option) return to this sheet (in Section 2.1.2) to interpret the above responses.

Mire Pond Scrub-Shrub System — Estuarine Portion

Response Sheet B1

THRESHOLD ANALYSIS: SIGNIFICANCE

This sheet is the appropriate place for recording the responses to the corresponding questions in Form B. Circle Y (yes) or N (no), being careful to note that the order of Y and N below frequently reverses.

General

1.1 N Y
1.2 N Y
1.3 N Y
1.4 N Y
1.5 N Y
1.6 N Y
2. Y N

See comments for Chincoteague Ridge/Swales

See Comments for Chincoteague Ridge/Swales

Recharge

3. Y N
4. Y N
5. Y N
6. Y N
7. Y N
8. Y N
9. Y N
10. N Y

Discharge

11. Y N
12. Y N
13. Y N
14. Y N
15. N Y

See comments for Mire Pond Fill

Flood Storage

16. Y N
17. Y N
18. Y N
19. Y N
20. Y N
21. Y N
22. N Y

See comments for Mire Pond Fill

See Comments for Mire Pond Fill

Shoreline Anchoring

23. Y N
24. Y N
25. Y N
26. Y N
27. Y N
28. Y N
29. N Y

Sediment Trapping

30. Y N
31. Y N
32. Y N
33. Y N
34. Y N
35. Y N
36. N Y

Nutrient Retention

37. Y N
38. Y N
39. Y N
40. Y N
41. Y N
42. N Y

Fish Food Chain/ Habitat

43. Y N
44. Y N
45. Y N
46. Y N
47. Y N
48. Y N
49. Y N
50. Y N
51. Y N
52. Y N
53. N Y

See Comments for Mire Pond Fill

See Comments for Mire Pond Fill

Wildlife Habitat

54. Y N
55. Y N
56. Y N
57. Y N
58. Y N
59. Y N
60. N Y

Active Recreation

61. Y N
62. Y N
63. Y N
64. Y N
65. Y N
66. Y N
67. N Y

See Comments for Mire Pond Fill

Passive

68. Y N
69. Y N
70. Y N
71. Y N
72. Y N
73. Y N
74. Y N
75. Y N
76. Y N
77. Y N
78. N Y

Form "A" Comments (Mire Pond Scrub-Shrub - Estuarine Portion)

2.2	Basin's outlet is constricted where Mire Pond joins the dredged portion of Fowling Gut (and overly restricted culvert at county roads 2112 and 2114) Refers only to wetland area; Spartina present
3.1-3.2	Sinuous because "basin" includes all of Fowling Gut
5.2	See site map (Figure 11) and definitions for this site
7	Predictor not used
8	Sub-watershed = upland adjacent to and surrounding Mire Pond and Fowling Gut to Chincoteague Bay
9	Predictor not used
21	Refers strictly to the wetlands in WIA (see Methods section)
23.1-23.9	Sediments are sand with shallow layer of porous organic
24	This is an estimate because we lack salinity measurements during droughts
36	No measurements; we have estimated
38	Culvert at county road 2112 and 2114 causes flow blockage at outlet
39.5	Culverts at roads 2112 and 2114 probably restrict access by estuarine fish to some extent
39.6	Significant contribution of freshwater comes from storm water runoff from developed areas (through Fowling Gut) to this basin
52.1	No data

53,54	No data	61	No data
56	No data	64	Guess
58	No data	66	Tidal
59	No data	67	No data
60	No data	68	No data

3.6.3 Adamus and Stockwell Evaluations: Mire Pond Scrub-Shrub System - Palustrine Portion

Summary Sheet D

This form is the appropriate place for recording the ratings that result from use of the interpretation procedures and keys in Sections 2.1.2, and 2.2.2. As each analysis is completed, enter its rating (high,moderate, or low; or A, B, or C) in the relevant box until all boxes for functions of interest are filled.

Begin by labeling the context of the analysis (pre- or post- construction, with or without mitigation, name of basin and WIA). Then enter the data, using the numbered footnotes to help locate the associated analyses. For the evaluation of each function's Effectiveness, enter whichever rating is higher--That for the basin or that for the WIA. The evaluation of the impact vector is optional.

BASIN _____ WIA _____ PROJECT _____

EVALUATION TIME FRAME (PRE/POST) _____ MITIGATION PLAN # _____

FUNCTION	EFFECTIVENESS[1]	OPPORTUNITY[1]	FUNCTIONAL RATING[2]	SIGNIFICANCE[3]	FUNCTIONAL SIGNIFICANCE[4]
GROUND WATER RECHARGE[5]	high	moderate	high	moderate	high
GROUND WATER DISCHARGE[6]	low		low	low	low
FLOOD STORAGE[7]	high	high	high	high	very high
SHORELINE ANCHORING[8]	high	low	moderate	moderate	moderate
SEDIMENT TRAPPING[9]	high	moderate	high	high	very high
NUTRIENT RETENTION					
LONG-TERM[10]	high	high	high	high	very high
SEASONAL[11]	high	high	high		very high
FOOD CHAIN SUPPORT					
DOWNSTREAM[12]	moderate		moderate	low	moderate
IN-BASIN[13]	moderate		moderate		moderate
FISHERY HABITAT					
WARMWATER[14]	low		low	moderate	low
COLDWATER[14]					
COLDW.RIVERINE[14]					
ANADROMOUS RIV.					
SPECIES[15] _____					
WILDLIFE HABITAT	Summer	winter			
GENERAL DIVERSITY[16]	low*		low		low
WATERFOWL GP.[17] 1	low	low	low		low
WATERFOWL GP.[17] 2	low	low	low	moderate	low
SPECIES[18] Black Duck	low	low	low		low
SPECIES[18] _____					
SPECIES[18] _____					
ACTIVE RECREATION[19]					
SWIMMING	low		low		low
BOAT LAUNCHING	low		low		low
POWER BOATING	low		low	moderate	low
CANOEING	low		low		low
SAILING	low		low		low
PASSIVE RECREATION AND HERITAGE[20]				moderate	moderate
IMPACT VECTOR RATING[21]					

FOOTNOTES

These entries will be based on analyses in the following parts of Volume II (numbers correspond to footnotes above):

[1]-Forms A, A1 (p. 6, 51); [2]-Section 2.1.2.2. (p. 97); [3]-Forms B, B1 (p. 38, 54); [4]-Section 2.1.2.2. (p. 97); [5]-Interpretation key in Section 2.1.2.1. p. 57; [6]-p. 59; [7]-p. 60; [8]-p. 62; [9]-p. 64; [10]-p. 67; [11]-p. 67; [12]-p. 69; [13]-p. 71; [14]-p. 73; [15]-p. 75; [16]-p. 79; [17]-p. 80; [18]-p. 84; [19]-p. 91; [20]-p. 92; [21]-p. 93.

*Low sediment no open water

Mire Pond Scrub-Shrub System - Palustrine Portion

Response Sheet A1

THRESHOLD ANALYSIS: FUNCTIONAL OPPORTUNITY AND EFFECTIVENESS

This sheet is the appropriate place for recording the responses to corresponding questions in Form A. A "yes" (Y) or "no" (N) response must be circled for all parts of each question, even when the response seems obvious. This response sheet has two major columns--"WIA" and "BASIN", and within each of these, three subcolumns entitled "$\bar{x}$", "W", and "D", which address, when relevent, the seasonal changes in some of the predictors, as follows:

$\bar{x}$ column responses are those addressing either (a) the average annual condition, or (b) the condition intermediate between the wettest and driest annual conditions (e.g., late June in most Prairie pothole wetlands), or (c) the condition of maximum annual standing crop of wetland plants, or (d) if tidal, the average daily mid-tide condition.

W column responses are those addressing what the area would look like (a) during the wettest time of an average year, or (b) if the area is tidal, what it would look like during an average daily high tide (flooded) condition.

D column responses are those addressing what the area would look like during either the driest time of the year (questions pertaining to hydrology) or if the question pertains to vegetation, then during the dormant time of the year. If the area is tidal, "D" refers to its daily low tide (exposed) condition.

For example, question 2.1.1 should first be asked and answered in the context of the WIA's (wetland impact area's) average condition, then in terms of its wettest condition, then the basin's average condition, and finally the basin's wettest condition. This should then be repeated for question 2.1.2. Because no Y/N choice is given in either "D" column, the area's dry or dormant condition need not be evaluated for this question. Similarly, some questions will require responses only for the WIA or basin, but not both.

Q. #	WIA $\bar{x}$	WIA W	WIA D	BASIN $\bar{x}$	BASIN W	BASIN D	
Office-type Data							
1.1	Y (N)	Y (N)	Y (N)	Y (N)	Y (N)	Y (N)	See Comment form
1.2	Y (N)	Y (N)	Y (N)	Y (N)	Y (N)	Y (N)	
1.3	Y (N)	Y (N)	Y (N)	Y (N)	Y (N)	Y (N)	
1.3.1	Y (N)	Y (N)	Y (N)	Y (N)	Y (N)	Y (N)	

Mire Pond Scrub-Shrub System - Palustrine Portion

Q. #	WIA R	WIA W	WIA D	BASIN R	BASIN W	BASIN D			
2.1.1	Y N	Y N		Y N	Y N		See Comment form		
2.1.2	Y N	Y N		Y N	Y N				
2.2.1	Y N	Y N		Y N	Y N				
2.2.2	Y N	Y N		Y N	Y N				
3.1				Y N					
3.2				Y N					
4.1	Y N								
4.2	Y N								
5.1				Y N			See comment form		
5.2				Y N					
6.1		Y N					See	Comment	form
6.2		Y N							
7.1				Y N			see	Comment	form
7.2				Y N					
8.1				Y N			See	Comment	form
8.2				Y N					
9.1				Y N			see	comment	form
9.2				Y N					
10.1	Y N								
10.2	Y N								
10.3	Y N		NA						
10.4	Y N								
11.1	Y N								
11.2	Y N		NA						
12.1		Y N							
12.2		Y N							
13.1				Y N					
13.2				Y N		NA			
14.	Y N			Y N					
15.1	Y N								
15.2	Y N								
15.3	Y N								
15.4	Y N								
15.5	Y N								
15.6	Y N								
15.7	Y N								
16.	Y N								
17.1	Y N								
17.2	Y N								
18.	Y N								
19.	Y N		NA						
20.				Y N					
21.1	Y N						See Comment form		
21.2	Y N								
21.3	Y N								
21.4	Y N								
21.5	Y N								
21.6	Y N								
Field-type Data									
22.1	Y N	Y N		Y N	Y N		See Comment form		
22.1.1	Y N	Y N		Y N	Y N				
22.1.2	Y N	Y N		Y N	Y N				
22.1.3	Y N	Y N		Y N	Y N				
22.1.4	Y N	Y N		Y N	Y N				
22.1.5	Y N	Y N		Y N	Y N				
22.2	Y N	N		Y N	N				
22.2.1	N	N		N	N				

Mire Pond Scrub-Shrub System - Palustrine Portion

Q. #	WIA S	WIA W	WIA D	BASIN S	BASIN W	BASIN D			
22.2.2	N	N		N	N				
22.2.3	N	N		N	N				
22.2.4	N	N		N	N				
22.2.5	N	N		N	N				
22.3	Y	Y		Y	Y				
22.3.1	Y	Y		Y	Y				
22.3.2	Y	Y		Y	Y				
22.3.3	Y	Y		Y	Y				
22.3.4	Y	Y		Y	Y				
22.4	Y	Y		Y	Y				
22.4.1	Y	Y		Y	Y				
22.4.2	Y	Y		Y	Y				
22.5	Y	Y		Y	Y				
22.6	Y	Y		Y	Y				
23.1	Y			Y			see Comment form		
23.2	Y			Y					
23.3	Y			Y					
23.4	Y			Y					
23.5	Y			Y					
23.6	Y			Y					
23.7	Y			Y					
23.8	Y			Y					
23.9	Y			Y					
24.1	Y	Y	Y						
24.2	Y	Y	Y						
24.3	Y	Y	Y						
24.4	Y	Y	Y						
24.5	Y	Y	Y						
24.6	Y	Y	Y						
25.1	Y								
25.2	Y								
25.3	Y								
26.1			Y			Y	see Comment form		
26.2			Y			Y			
26.3			Y			Y			
26.4			Y			Y			
26.5			Y			Y			
26.6			Y			Y			
26.7			Y			Y			
26.8			Y			Y			
26.9			Y			Y			
26.10			Y			Y			
26.11			Y			N			
27.1		Y			Y				
27.2		N			N				
28.1				Y					
28.2				Y					
29.				Y					
30.1	Y	N							
30.2	Y	N	NA						
31.1		Y							
31.2		Y							
32.1	Y	N	Y N	Y	N	Y N			
32.2	Y	Y	Y	Y	Y	Y			
32.3	Y	Y	Y	Y	Y	Y			
32.4	Y	Y	Y	Y	Y	Y			
32.5	Y	Y	Y	Y	Y	Y			
32.6	Y	Y	Y	Y	Y	Y			
32.7	Y	Y	Y	Y	Y	Y			
32.8	Y	Y	Y	Y	Y	Y			

Mire Pond Scrub-Shrub System - Palustrine Portion

O. #	WIA X	WIA W	WIA D	BASIN X	BASIN W	BASIN D			
33.1	Y N	Y N	Y N	Y N	Y N	Y N			
33.2	Y N	Y N	Y N	Y N	Y N	Y N			
33.3	Y N	Y N	Y N	Y N	Y N	Y N			
33.4	Y N	Y N	Y N	Y N	Y N	Y N			
33.5	Y N	Y N	Y N	Y N	Y N	Y N			
33.6	Y N	Y N	Y N	Y N	Y N	Y N			
33.7	Y N	Y N	Y N	Y N	Y N	Y N			
33.8	Y N	Y N	Y N	Y N	Y N	Y N			
34.1	Y N	Y N	Y N	Y N	Y N	Y N			
34.2	Y N	Y N	Y N	Y N	Y N	Y N			
34.3	Y N	Y N	Y N	Y N	Y N	Y N			
34.4	Y N	Y N	Y N	Y N	Y N	Y N			
34.5	Y N	Y N	Y N	Y N	Y N	Y N			
34.6	Y N	Y N	Y N	Y N	Y N	Y N			
34.7	Y N	Y N	Y N	Y N	Y N	Y N			
34.8	Y N	Y N	Y N	Y N	Y N	Y N			
35.1	Y N	Y N		Y N					
35.2.1				Y N					
35.2.2				Y N					
35.2.3				Y N					
36.	Y N			Y N			See Comment form		
37.1		Y N							
37.2			Y N						
38.1				Y N	Y N	Y N			
38.2	Y N	Y N	NA						
39.1	Y N		NA						
39.2	Y N						see Comment form		
39.3	Y N								
39.4	Y N								
39.5	Y N								
39.6				Y N					
40.	Y N	Y N	NA						
41.1				Y N	Y N	Y N			
41.1.1				Y N	Y N	Y N			
41.1.2				Y N	Y N	Y N			
41.1.3				Y N	Y N	Y N			
41.2				Y N	Y N	Y N			
41.2.1				Y N	Y N	Y N			
41.2.2				Y N	Y N	Y N			
41.2.3				Y N	Y N	Y N			
41.3				Y N	Y N	Y N			
41.3.1				Y N	Y N	Y N			
41.3.2				Y N	Y N	Y N			
41.3.3				Y N	Y N	Y N			
41.4				Y N	Y N	Y N			
42.1	Y N	Y N	Y N						
42.2	Y N	Y N	Y N						
42.3	Y N	Y N	Y N						
43.	Y N	Y N	Y N	Y N	Y N				
44.1				Y N	Y N		See Comment form		
44.2				Y N	Y N	NA			
45.1	Y N								
45.2	Y N								
46.1	Y N								
46.2	Y N								
46.3	Y N								
46.4	Y N								
47.1	Y N								
47.2	Y N								
48.1	Y N	Y N							
48.2	Y N	Y N							

Mire Pond Scrub-Shrub System - Palustrine Portion

Q. #	WIA E	WIA W	WIA D	BASIN E	BASIN W	BASIN D	
49.1				(Y) N			
49.2				Y (N)			
50.	Y (N)	Y (N)	Y (N)				
51.		Y N	NA				NO Open water
Detailed Data							
52.1.1	Y N		NA				No measurements
52.1.2	Y N		NA				
52.2.1	Y (N)						See Comment form
52.2.2	Y (N)						
53.1	Y N		NA				No measurements
53.2	Y N						
54.1	Y N		NA				No measurements
54.2	Y N						
55.	Y (N)						
56.			NA		Y N		
57.1	Y N						
57.2	Y N		NA				
57.3	Y N						
57.4	Y N						
58.1	Y N						No measurements
58.2	Y N		NA				
58.3	Y N						
58.4	Y N						
59.1				Y N			
59.2		NA		Y N			No measurements
59.3				Y N			
60.1						Y N	
60.2		NA		Y N			No measurements
60.3				Y N			
61.1	Y N						No measurements
61.2	Y N	NA					
62.	Y N	NA					
63.1				NA		Y N	
63.2						Y N	
64.				NA		Y N	
65.	(Y) N						
66.1		Y N				Y N	
66.2		Y N	NA	NA		Y N	No measurements
67.1		Y N				Y N	
67.2		Y N	NA	NA		Y N	NO outlet
68.1	Y N					Y N	
68.2	Y N		NA	NA		Y N	NO outlet
Derived Responses							
69.1	Y N						
69.2	Y N						
70.1	Y N						
70.2	Y N						
71.1	Y N						
71.2	Y N						
72.1	Y N						
72.2	Y N						
73.1	Y N						
73.2	Y N						
74.1	Y N						
74.2	Y N						
75.1	Y N						
75.2	Y N						

After responses to all possible questions (Form A) have been recorded above, turn to Form B (page 38). You will(as an option) return to this sheet (in Section 2.1.2) to interpret the above responses.

Mire Pond Scrub-Shrub System — Palustrine Portion

Response Sheet B1

THRESHOLD ANALYSIS: SIGNIFICANCE

This sheet is the appropriate place for recording the responses to the corresponding questions in Form B. Circle Y (yes) or N (no), being careful to note that the order of Y and N below frequently reverses.

General

1.1 N Y See Comments for Chincoteague Ridge/Swale Site
1.2 N Y
1.3 N Y
1.4 N Y
1.5 N Y
1.6 N Y
2. Y N See Comments for Chincoteague Ridge/Swale Site.

Recharge

3. Y N
4. Y N
5. Y N
6. Y N
7. Y N
8. Y N
9. N Y See Comments for Mire Pond Fill.
10. N Y

Discharge

11. Y N
12. Y N See Comment for Mire Pond Fill.
13. Y N See Comments for Mire Pond Fill.
14. Y N
15. N Y

Flood Storage

16. Y N
17. Y N
18. Y N
19. Y N
20. Y N
21. Y N
22. N Y

Shoreline Anchoring

23. Y N
24. Y N
25. Y N
26. Y N
27. Y N
28. Y N
29. N Y

Sediment Trapping

30. Y N
31. Y N
32. Y N
33. Y N
34. Y N
35. N N
36. N Y

Nutrient Retention

37. Y N
38. Y N
39. Y N
40. Y N
41. Y N
42. N Y

Fish Food Chain/ Habitat

43. Y N
44. Y N
45. Y N
46. Y N
47. Y N
48. Y N
49. Y N
50. Y N
51. Y N
52. Y N
53. N Y

Wildlife Habitat

54. Y N
55. Y N
56. Y N
57. Y N
58. Y N
59. Y N
60. N Y

Active Recreation

61. Y N
62. Y N
63. Y N
64. Y N
65. Y N
66. Y N
67. N Y

Passive

68. Y N
69. Y N
70. Y N
71. Y N See comments for Mire Pond Fill.
72. Y N
73. Y N
74. Y N
75. Y N
76. Y N
77. Y N
78. N Y

Form "A" Comments (Mire Pond Scrub-Shrub: Palustrine)

1	We are assuming that there is no inlet or outlet due to isolation by road without culvert (drainage was formerly to the south)
2.2	Basin = WIA
5.2	See site map (Figure 11) and definitions for this site
6.1-6.2	Wetland area includes scrub/shrub area west of basin
7	Predictor not used
8	Sub-watershed = narrow fringe of upland surrounding WIA
9	Predictor not used
21	Refers strictly to the wetlands in WIA
22	Scrub/shrub area (west of ponds) exceeds (but only slightly) the emergent wetland areas within the ponds
23.1-23.9	Sediments are sand with shallow layer of porous organic
26	May be a small area near road (dike) which is permanently flooded. Also may be scrub/shrub areas which are temporarily flooded
36	Although we have no estimates, the amount of accumulated organic matter suggests that the D.O. levels are probably low in the summer
39.4	Road/dike construction has impounded wetlands at this site
44	There is no wetland-water edge
51	No open water
52.1	No measurements
52	Refers only to wetland area
53	No measurements
54	No measurements

58	No measurements
59	No measurements
60	No measurements
61	No measurements
64	Guess
66	No measurements available
67	No outlet
68	No outlet